UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

NETLIST, INC.,	
Plaintiff,)
vs.) Case No. 2:21-CV-463-JRG
SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG SEMICONDUCTOR, INC.,))))))
Defendants.))

PLAINTIFF NETLIST INC.'S OPPOSITION TO SAMSUNG'S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT OF U.S. PATENT NOS. 8,787,060 AND 9,318,160 (Dkt. 197)

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I. <u>INTRODUCTION</u>

During claim construction, the Court found that Netlist's arguments in the prosecution of the '060 patent regarding Rajan's "DRAM circuits 206A-D" affected a structural disclaimer, and thus held that "array die" means "array die that is different from a DRAM circuit." Dkt. 114 at 31-32, 35. The Court stated at the *Markman* hearing that the meaning of "DRAM circuit" in the Court's construction "would be for the experts." Ex. 1 (*Markman* Hearing Tr.) at 34:17-35:11. Netlist's expert Dr. Brogioli and Samsung's expert Dr. Robins have offered competing opinions on the application of the Court's construction to the accused products.

Summary judgment should be

denied.

II. RESPONSE TO STATEMENT OF ISSUES

Whether Samsung's accused HBM products infringe the asserted claims of the '060 and '160 patents, where the Court construed "array die" as "array die that is different from a DRAM circuit," and the experts disagree on the meaning of "DRAM circuit."

III. RESPONSE TO STATEMENT OF UNDISPUTED MATERIAL FACTS

1. **Disputed.** Additional facts: Samsung ignores that all the asserted claims of the '060/'160 patents require "array die(s)" with specific features. For example, claim 1 of the '060 patent requires "a plurality of stacked array dies including a first group of array dies and a second group of at least one array die, each array die having data ports." '060 patent, 23:58-64. Claim 1 further requires a "first die interconnect in electrical communication with the first group of array dies and not in electrical communication with the second group of at least one array die," and a "second die interconnect in electrical communication with the second group of at least one array die and not in electrical communication with the first group of array dies." *Id.*, 23:65-24:5. The memory package of claim 1 also includes a "control die" with a "first data conduit" and a "second data conduit" connected

to "first die interconnect" and "second die interconnect" respectively. *Id.*, 24:6-15. Claim 1 of the '160 patent recites similar limitations. *See* '160, 23:46-24:3. In summary, the array die must have interconnects that allow it to be in electrical communication with only a subset of the stack.

- **2-6. Disputed.** *See* Sections IV.A-B below.
- 7. Undisputed.

 Disputed. As explained in Netlist's May 4, 2022 infringement contentions,
Mtn. at 3-5, Samsung's own witnesses testified to the contrary.

16-19. Disputed. Additional facts: To the extent Samsung contends that
amounts to an admission of
non-infringement, Samsung fails to point to any evidence that its "DRAM core dies" are or include
the "structural" "DRAM circuits" of Rajan. Mot. at 5. Samsung's corporate representative on the
accused HBM products testified that
Samsung's expert Mr. McAlexander testified that
. Neither of the
witnesses testified that the
Like Samsung's corporate
representative, Mr. McAlexander was shown a design corresponding to Rajan
Dr. Brogioli's report also cites to
DI. Diogion o report moo cites to

Samsung's expert, Dr. Robins, admitted

IV. ARGUMENT

A. The Prosecution History Discussion of Rajan

During prosecution of the '060 patent, the Examiner rejected the pending claims based on the "Rajan" reference (US Patent Application No. 2008/0025137), citing to Paragraph [0043] of Rajan, and Figure 2B. See Ex. 8 (Rajan); Ex. 9 (Oct. 11, 2013 Office Action) at 4-5.

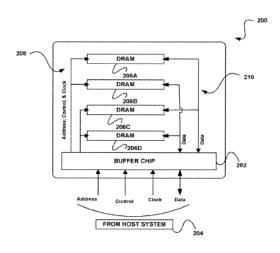


FIGURE 2B

To traverse the rejection over Rajan, Netlist made the following statement: "First of all, Rajan does not disclose 'a plurality of stacked array dies.' Rajan merely stacks DRAM circuits 206A-D, which are different from array dies. As a result, Rajan's buffer chip 202 also operates very differently from the control die in claim 1." Ex. 12 (Jan. 13, 2014 Amendment) at 11-12. Simply put, there was a "structural" distinction of the Rajan "DRAM circuit." The examiner, while aware that Rajan also disclosed non-volatile memory cells, accepted the explanation and allowed the claims. Thus, under Samsung's own theory, whether the claimed array dies included non-volatile memory or DRAM is not a reason for distinguishing Rajan.

The distinction makes sense, because as noted above the "array die" in the patents requires data ports and/or interconnects that run through it that allow the array dies to communicate with only a subset of the dies in the stack.

B. The Court Left the Application of "DRAM Circuit" In the Court's Construction of "array die" Open "for the experts" to Determine

Samsung's central argument is that the Court considered and rejected the arguments Dr.

Brogioli presents in his report regarding

See Mtn. at 8-10. However, Samsung fails to note that the Court expressly declined to define the term "DRAM circuit" in its construction, stating at the Markman hearing that this would be "for the experts" to define. Ex. 1 (Markman Hearing Tr.) at 33:15-34:11. Consistent with this guidance, the Court's Markman Order found that Netlist had structurally distinguished "stacked DRAM circuits" from "stacked array dies." Dkt. 114 at 32.

Moreover, the Court's Markman Order did not mention, let alone address, what constitutes

Rajan's "DRAM circuits," as Samsung erroneously contends. *See* Dkt. 114 at 31-32. Rather, the Court only addressed two of Netlist's arguments, namely, that the prosecution statements were made to explain the structure of Rajan's "control die," and that the inventor could not have intended to disclaim "DRAM circuits" given the language of claim 29. The Court found that the reason for the prosecution statements were unimportant. Dkt. 114 at 32. On that basis, the Court concluded:

Netlist *structurally* distinguished "stacked DRAM circuits" from "stacked array dies" to obtain the patent. Based on that distinction, the Court construes "array die" as "array die that is different from a DRAM circuit."

Id. (emphasis original).

The Court's Order acknowledged that Netlist only distinguished "stacked DRAM circuits" from "stacked array dies" during prosecution. Id. In sum, the Court invited the experts to opine on what exactly the term "DRAM circuit" in the Court's construction meant. Ex. 1 (Markman Hearing Tr.) at 33:15-34:11. It did not reject Netlist's argument as to what constitutes a "DRAM circuit", and thus Dr. Brogioli's opinions regarding the plain meaning of the term "DRAM circuit" are not an attempt to relitigate the construction of "DRAM circuit" because that term was expressly left open for the experts to explain. Contra TiVo Inc. v. Dish Network Corp., 640 F. Supp. 2d 853, 869, 871 (E.D. Tex. 2009) (finding that EchoStar's judicial estoppel arguments regarding the terms "parses" and "automatic flow control" were "a thinly veiled attempt to reargue claim construction" where the Court had previously construed those exact terms, and the Federal Circuit affirmed those constructions), rev'd on other grounds sub nom, TiVo Inc. v. EchoStar Corp., 646 F.3d 869 (Fed. Cir. 2011).

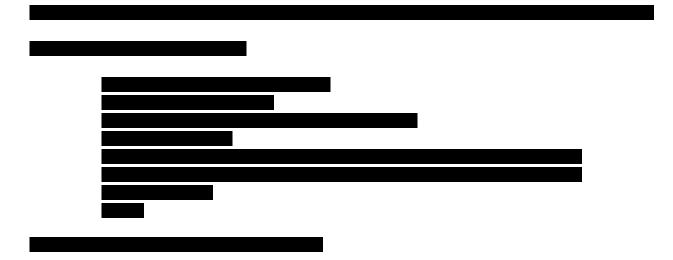
C. There is a Genuine Issue of Material Dispute As to Whether the Core Dies in Samsung's HBM Products Are "DRAM circuits"

Samsung argues that summary judgment is proper under the Court's construction of "array die" because "it is undisputed that the core die of the accused HBM products are DRAM." Mtn. at 6. But the Court did not construe "array dies" as different from "DRAM"; rather, the dispute is whether

those DRAM core dies differ from "DRAM circuits." There is ample evidence that they are structurally different.

At deposition, he was shown the following image,

which depicts Rajan Fig. 2B (with reference numbers eliminated):

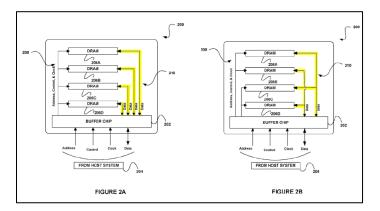


ii.	"DRAM circuit" Are Different from the DRAM Cells and Arrays Present Accused HBM Products	in
Dr. Brog	gioli explains	

Rajan, [0050], which notes "data signals may be wired as one common bus, several busses or as an

individual bus to each DRAM circuit 206A-D.").





[Ex. 8 (Rajan) Figs. 2A-2B annotated to highlight external wire bonds for data]



[Ex. 7:

iii. <u>Sa</u>	msung's Own Documents and Witnesses Repeatedly Confirm that
Dr. Brogioli 1	notes example after example of
	Dr. Brogioli also notes
As is apparen	t from the above, a POSITA would not treat the terms "DRAM circuit" and
"DRAM" interchange	ably. Cf. Mtn. at 6;
	Indeed, as Dr.
Brogioli notes,	
Diogion notes,	
iv. <u>D</u> i	r. Brogioli Provided Substantial Analysis Demonstrating
Dr. Brogioli g	goes on to demonstrate that

For example,	
mallest building block for the array,	A memory cell is the
	Dr. Brogioli explains that
Or. Brogioli cites to	For example
	D
rogioli also cites to	

Dr. Brogioli further

A reasonable jury, in light of the evidence presented above, could conclude that the core dies in Samsung's accused HBM products meet the "array die" limitations of the '060/'160 claims under the Court's construction excluding "DRAM circuits." The situation here thus differs from *Iris Connex*, in which the Court found no literal infringement under a construction requiring a "physically moveable" reading head because "[n]either Plaintiff nor its expert argue that the Accused Products literally infringe under a construction requiring a single, physically moveable camera." *Iris Connex*, LLC v. Acer Am. Corp., No. 2:15-CV-1909, 2016 WL 4596043, at *19 (E.D. Tex. Sept. 2, 2016).

The other cases Samsung cites are similarly distinguishable. In *Allergan Sales, LLC v. Sandoz, Inc.*, the Federal Circuit upheld a finding that a claim requiring "0.2% brimonidine" was not infringed where the plaintiff's expert confirmed the proposed generic was "a distinct pharmaceutical compound that reduces to 0.132% brimonidine," i.e., less than the claim required. 717 F. App'x 991, 996 (Fed. Cir. 2017); *see also Calypso Wireless, Inc. v. T-Mobile USA Inc.*, No. 2:08-CV-441, 2013 WL 684741, at *1 (E.D. Tex. Feb. 25, 2013) (uncontroverted evidence that "the wireless communication device does not know its distance from the Internet access facility," as required by the court's construction). *Packless Metal Hose, Inc. v. Extek Energy Equip. (ZHEJLANG) Co.* is even less apposite: in that case, the plaintiff failed to present evidence as to whether circular-shaped tubes infringed under the Court's construction of the claims, contending that only oval-shaped tubes did. No. 2:09-CV-265, 2013 WL 682845, at *5-6 (E.D. Tex. Feb. 22, 2013). Unlike each of these cases, Dr. Brogioli provided extensive analysis as to

Samsung's Motion does not meaningfully address Dr. Brogioli's analysis. Mtn. at 6-7. Rather, Samsung focuses on statements from Netlist's complaint and infringement contentions to argue that "Netlist has consistently argued that the accused HBM products' DRAM core dies are the features that satisfy the 'array die(s)' limitation." *Id.* But those documents never stated that the DRAM core dies in Samsung's accused HBM products are the same as "DRAM circuits." Nor do those documents explain the meaning of "DRAM circuits." Thus, whatever Netlist supposedly admitted in the complaint and infringement contentions, Netlist never agreed that HBM core dies are "DRAM circuits" under the Court's construction. *Contra* Mtn. at 6-7.

v. The Experts' Disagreement Regarding the Meaning of "DRAM circuits" Should Be Resolved by the Jury

As noted above, Dr. Brogioli marshalled significant evidence showing
. Samsung's
expert, Mr. McAlexander,
By contrast,
Dr. Robins disagrees with Dr. Brogioli's analysis.
Judge Payne made clear at the Markman hearing, it is "for the experts" to explain the meaning of the
term "DRAM circuits." Ex. 1 (Markman Hearing Tr.) at 33:15-34:11. To the extent the experts differ

in their opinions, it is for the jury to decide whose testimony to credit.

Additionally, Dr. Robins' analysis of "DRAM circuit" is conclusory and contradicts the
prosecution history, further demonstrating why summary judgment of non-infringement
inappropriate. For example, Dr. Robins asserts,
He further opine
that
Despite his assertion that
Dr. Robins' analysis is also inconsistent with the prosecution history. For example, Dr. Robin
acknowledges
He goes on
conclude that

The Examiner allowed the claims after Netlist structurally distinguished the invention from Rajan. Ex. 14 (2014-03-26 Notice of Allowance). The only reasonable conclusion is that the Examiner did not allow the claims based on a distinction of memory types (e.g., DRAM versus non-DRAM such as flash), given Rajan's alleged "broad" disclosure of different memory types. In other words, the prosecution history directly contradicts Dr. Robins' assertion

Indeed, for Dr. Robins to make this argument is for Samsung to re-draft the Court's construction. The construction did not state that "DRAM" was disclaimed, it stated that a "DRAM" is a "DRAM" was disclaimed, it stated that a "DRAM" is a "DRAM" was disclaimed, it stated that a "DRAM" was disclaimed, it stated tha

circuit" of Rajan was disclaimed. The improper construction redrafting performed by Dr. Robins is subject to a motion to strike.

D. Dr. Brogioli's Application of the Court's Construction is Proper

Samsung argues that Dr. Brogioli's opinions regarding "DRAM circuit" are improper, and contradictory to the Court's claim construction. As explained above, the Court left the meaning of "DRAM circuit" open for the experts to consider, and did not reject the argument Dr. Brogioli now advances. *See supra* V. Dr. Brogioli's opinions on that term are thus proper expert opinion.

It is well established that experts may provide opinions on the plain meaning of terms if those opinions do not contradict the court's claim construction order. *See Traxcell Techs.*, *LLC v. AT&T Corp.*, No. 2:17-CV-00718, 2019 WL 4470618, at *2 (E.D. Tex. Sept. 18, 2019); *see also* Wi-LAN Inc.

v. HTC Corp., No. 2:11-CV-68-JRG, 2014 WL 1347871, at *6 (E.D. Tex. Apr. 3, 2014) (finding expert testimony permissible because it "did not contradict the Court's claim construction") *aff'd in part, rev'd in part sub nom, Wi-Lan, Inc. v. Apple, Inc.*, 811 F.3d 455 (Fed. Cir. 2016). Moreover, experts are permitted to offer an opinion on terms left unconsidered by the court. *See Equistar Chemicals, LP v. Westlake Chem. Corp.*, No. 6:14-CV-68, 2016 WL 4375955, at *3 (E.D. Tex. Feb. 26, 2016).

In *Traxxell*, Judge Payne rejected several challenges to expert opinions on the alleged basis that they conflicted with the court's *Markman* order. *Traxxell*, 2019 WL 4470618, at *1. In particular, based on "statements within the prosecution history" the court construed "location" to mean "location that is not merely a position in a grid pattern." *Id.* at *4 n.1. The expert defined the term location as "a specific point in space . . . characterized by values of latitude and longitude." *Id.* at *3. The court held that this opinion "does not conflict with the Court's construction." *Id.* at *4. The court reasoned that its construction of "location" possesses a "carve-out" but "otherwise leaves 'location' undefined." *Id.* Just as in *Traxxell*, the court here provided a construction of the term "array dies" based on statements made during prosecution. Dkt. 114 at 31-32. And just as in *Traxxell*, the court left a component of its construction ("DRAM circuits") undefined. *Id.* Thus, Dr. Brogioli was permitted to offer an opinion on how a POSITA would understand this term, so long as that opinion did not contradict the court's claim construction order. *Traxxell*, 2019 WL 4470618, at *1.

Equistar is also instructive. There, the defendant argued that plaintiff's expert expressed opinions "based upon constructions that the Court Considered and rejected in the claim construction opinion." Equistar, 2016 WL 4375955, at *1. Westlake argued that the expert "impermissibly narrow[ed] the scope of the asserted claims . . . by opining that the claimed invention is limited to one recovery step." Id. (emphasis added). The court disagreed and permitted the expert to "offer an opinion on the term's plain and ordinary meaning," noting that it "did not expressly consider and reject a single recovery step during claim construction." Id. at *3. Similarly, the court here did not expressly rule on

an interpretation of what "DRAM circuit" means, so Dr. Brogioli's opinion on the plain and ordinary meaning of this unconstrued term is likewise appropriate. *See* Ex. 1 (*Markman* Hearing Tr.) at 34:17-35:11 (Judge Payne confirming that defining "DRAM circuit" "would be for the experts").

None of Samsung's cited cases are on point. In the non-controlling *Quest Licensing*, the court had construed the term "changing information" to mean "*only* [price] data that has changed." *Quest Licensing Corp. v. Bloomberg L.P.*, No. 14-CV-561, 2017 WL 239345, at *2 (D. Del. Jan. 19, 2017), *aff'd*, 726 F. App'x 819 (Fed. Cir. 2018). There, the court found that Quest's expert failed to apply to the court's claim construction because his analysis completely ignored the use of the word "only" in the court's construction. *See id.* Dr. Brogioli by contrast

Cassadian Communications is also inapposite. There, the parties disputed the meaning of the word "presenting" in a method claim reciting the step of "presenting an incoming emergency call from a remote caller to a central data manager." Cassidian Comme'ns, Inc. v. microDATA GIS, Inc., No. 2:12-CV-00162, 2013 WL 6491477, at *3 (E.D. Tex. Dec. 10, 2013). The plaintiff argued that "presenting" a call simply meant "receiving" a call, and thus that a call could be "presented" to a "central data manager" through actors or equipment within the "central data manager"—an argument the Court noted "defies logic to at least some degree." Id. at *3-4. The Court noted that the specification demonstrated that "incoming emergency calls are passed on or routed to the central data manager by outside equipment or actors," and thus that Plaintiff's proposed construction of presenting "contradict[ed] the intrinsic evidence." Id. at *5 (emphasis added). Here by contrast, Dr. Brogioli's analysis is consistent with the intrinsic record. See supra V.

Samsung's reliance on *Genuine Enabling* is also misplaced. In that case, during prosecution the inventor argued that the prior art "taught 'slow-varying signals' whereas his inventions involved 'audio or higher frequency' signals" as input signals. *Genuine Enabling Tech. LLC v. Nintendo Co.*, 29 F.4th 1365, 1374 (Fed. Cir. 2022). The district court construed the "input signal" limitation in the asserted claims to mean "signals above 500 Hz" based on the applicant's prosecution statements and testimony from the accused infringer's expert that 500 Hz represented the upper limit of slow-varying signal. *Id.* at 1371-72, 1375. This testimony, however, was itself based on another extrinsic reference ("Yuce et al."). *Id.* at 1375. The Federal Circuit found that the district erred in relying on "extrinsic evidence upon extrinsic evidence to draw a bright line in claim scope *not suggested anywhere in the intrinsic record.*" *Id.* at 1375-76 (emphasis added). Here, the portions of Rajan that were the basis for rejection specifically discloses that its "DRAM circuits" are limited to wire-bonded configurations. *See supra* V.

Moreover, the Federal Circuit in *Genuine Enabling* found that the district court had erred in finding that the prosecution statements amounted to a disclaimer of "subject matter other than signals below the audio frequency spectrum." *See* 29 F.4th at 1375 at 1375-76. Specifically, regarding the inventor's arguments distinguishing the prior art in prosecution, the Federal Circuit explained that "[t]he examiner's acceptance of th[e] distinction and resulting decision to allow the claims suggest that [the inventor] and the examiner reached an understanding on that point." *Id.* at 1374-75. Thus, "[t]o the extent [the inventor's] statements may implicate other claim scope—such as signals of frequency up to 500 Hz—the record does not rise to the level of establishing a 'clear and unmistakable' disavowal." *Id.* at 1375 (citing *Tech. Props. Ltd. v. Huawei Techs. Co.*, 849 F.3d 1349, 1358 (Fed. Cir. 2017)).

Dated: February 17, 2023

Respectfully submitted,

/s/ Samuel F. Baxter

Samuel F. Baxter Texas State Bar No. 01938000 sbaxter@mckoolsmith.com Jennifer L. Truelove Texas State Bar No. 24012906 jtruelove@mckoolsmith.com MCKOOL SMITH, P.C.

104 East Houston Street Suite 300 Marshall, TX 75670 Telephone: (903) 923-9000

Facsimile: (903) 923-9099

Jason Sheasby (pro hac vice) jsheasby@irell.com Annita Zhong, PhD (pro hac vice) hzhong@irell.com Thomas C. Werner (pro hac vice) twerner@irell.com Andrew Strabone (pro hac vice) astrabone@irell.com Yanan Zhao (pro hac vice) yzhao@irell.com Michael W. Tezyan (pro hac vice) mtezyan@irell.com

IRELL & MANELLA LLP

1800 Avenue of the Stars, Suite 900 Los Angeles, CA 90067 Tel. (310) 277-1010 Fax (310) 203-7199

Rebecca Carson (pro hac vice) rcarson@irell.com **IRELL & MANELLA LLP** 840 Newport Center Drive, Suite 400

Newport Beach, CA 92660

Attorneys for Plaintiff Netlist, Inc.

CERTIFICATE OF SERVICE

I hereby certify that, on February 17, 2023 a copy of the foregoing was served to all counsel of record.

/s/ Jason Sheasby
Jason Sheasby

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

I hereby certify that the foregoing document and exhibits attached hereto are authorized to be filed under seal pursuant to the Protective Order entered in this Case.

/s/ Jason Sheasby
Jason Sheasby